Amendments to the Claims

The following listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims

Claim   1.   (Currently amended):   An integrated circuit pre-boot security controller adapted for inclusion in an electronic device that includes both a digital computer and a power subsystem for energizing operation of the digital computer, the pre-boot

5   security controller receiving electrical power even though the power subsystem is not energizing operation of the digital computer and being adapted for enabling the power subsystem to energize operation of the digital computer upon receiving a pre-recorded user password by the pre-boot security controller, the integrated

10   circuit pre-boot security controller comprising:

a [nonvolatile] non-volatile password memory that stores at least one user password;

a password input circuit for receiving a password that is to be compared with any user passwords recorded in said password

15   memory;

a digital logic circuit for comparing the password received by said password input circuit with any user passwords recorded in

said password memory if the pre-boot security controller is in a security operating mode; and

20   an output circuit that is coupled to said digital logic circuit for transmitting an output signal to the power subsystem that enables the power subsystem to energize operation of the digital computer if the password received by said password input circuit matches a user [passwords] <u>password</u> recorded in said 25 password memory.

Claim   2.   (Original):   The pre-boot security controller of claim 1 wherein said password memory is electronically rewritable.

Claim   3.   (Original):   The pre-boot security controller of claim 1 wherein said password memory separately records at least one user password and at least one supervisor password.

Claim   4.   (Original):   The pre-boot security controller of claim 1 wherein said password input circuit is a keypad interface that is adapted to be coupled to a security keypad for receiving the password that a user of the electronic device enters using the 5 security keypad for comparison with user passwords recorded in said password memory.

Claim   5.   (Original):   The pre-boot security controller of claim 4 wherein, when in a password entry mode, the keypad interface may also receive from the security keypad user passwords that the digital logic circuit records in said password memory.

Claim   6.   (Original):   The pre-boot security controller of claim 4 wherein upon receiving a password by said password input circuit which matches a user password recorded in said password memory, the pre-boot security controller transitions from the security operating mode to an application operating mode in which the pre-boot security controller preserves data about pressings of the security keypad.

Claim   7.   (Original):   The pre-boot security controller of claim 1 wherein said digital logic circuit is a state machine.

Claim   8.   (Original):   The pre-boot security controller of claim 1 wherein said output circuit also provides an output signal which indicates existence of the security operating mode.

Claim   9.   (Original):   The pre-boot security controller of claim 1 further comprising a System Management Bus ("SMBus") interface adapted to exchange signals with a SMBus included in the

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electronic device, said SMBus interface enabling the pre-boot

5   security controller to receive user passwords for storage in said

password memory.

Claim   10.   (Currently amended):   An   electronic   device

comprising:

a digital computer;

a power subsystem for energizing operation of said digital

5   computer; and

a pre-boot security controller that receives electrical power

even though said power subsystem is not energizing operation of

said digital computer and that is coupled to said power subsystem

for enabling said power subsystem to energize operation of said

10   digital computer upon receiving a pre-recorded user password by

said pre-boot security controller, said pre-boot security control-

ler including:

an integrated circuit that includes:

a [nonvolatile] non-volatile password memory that

15   stores at least one user password; a password input

circuit for receiving a password that is to be compared

with any user passwords recorded in said password memory;

a digital logic circuit for comparing the password

received by said password input circuit with any user

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passwords recorded in said password memory if the pre-boot security controller is in a security operating mode; and

an output circuit that is coupled to said digital logic circuit for transmitting an output signal to said power subsystem that enables said power subsystem to energize operation of said digital computer if the password received by said password input circuit matches a user [passwords] <u>password</u> recorded in said password memory.

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Claim   11. (Original):   The electronic device of claim 10 wherein said password memory included in said pre-boot security controller is electronically rewritable.

Claim   12. (Original):   The electronic device of claim 10 wherein said password memory included in said pre-boot security controller separately records at least one user password and at least one supervisor password.

Claim   13. (Original):   The electronic device of claim 10 wherein said password input circuit included in said pre-boot security controller is a keypad interface, the electronic device

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further comprising a security keypad that is coupled to the keypad

5 interface to transmit thereto for comparison with user passwords

recorded in said password memory the password that a user of the

electronic device enters using the security keypad.

Claim 14. (Original): The electronic device of claim 13

wherein the keypad interface of said pre-boot security controller,

when said pre-boot security controller is in a password entry mode,

may also receive from the security keypad user passwords that the

5 digital logic circuit records in said password memory.

Claim 15. (Original): The electronic device of claim 13

wherein said pre-boot security controller, upon receiving a

password by said password input circuit which matches a user

password recorded in said password memory, transitions from the

5 security operating mode to a application operating mode in which

the pre-boot security controller preserves data about pressings of

the security keypad.

Claim 16. (Original): The electronic device of claim 10

wherein said digital logic circuit included in said pre-boot

security controller is a state machine.

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Claim 17. (Original): The electronic device of claim 10 wherein said output circuit of said pre-boot security controller also provides an output signal which indicates existence of the security operating mode, the electronic device further comprising a status output subsystem which receives the output signal and presents a user of the electronic device with a perceptible indication that the security operating mode exists.

Claim 18. (Original): The electronic device of claim 10 wherein said pre-boot security controller further includes a SMBus interface, the electronic device further comprising a SMBus host that is coupled by a SMBus to the SMBus interface thereby enabling a computer program executed by said digital computer to record user passwords into said password memory via the SMBus.

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